

IN THE CLAIMS

Please amend the claims as follows.

Claim 1 (Canceled)

Claim 2 (Withdrawn): An active inductor comprising first to third field effect transistors, each having a source, a gate and a drain, wherein

said drain of said first field effect transistor is connected to said source of said second field effect transistor and said gate of said third field effect transistor,

said gate of said first field effect transistor is connected to said drain of said second field effect transistor,

said gate of said second field effect transistor is connected to said drain of said third field effect transistor,

said active inductor further comprising a feedback path provided between said source of said first field effect transistor and said source of said third field effect transistor,

said gate and said source of said third field effect transistor serve as two ports of said active inductor.

Claim 3 (Withdrawn): An active inductor comprising first to fourth field effect transistors, each having a source, a gate and a drain, wherein

said drain of said first field effect transistor is connected to said source of said second field effect transistor, said gate of said third field effect transistor and said gate of said fourth field effect transistor

said gate of said first field effect transistor is connected to said drain of said second field effect transistor,

said gate of said second field effect transistor is connected to said drain of said third field effect transistor,

said source of said third field effect transistor is connected to said source of said fourth field effect transistor,

said active inductor further comprising a feedback path provided between said source of said first field effect transistor and said drain of said fourth field effect transistor, wherein,

said source and said drain of said fourth field effect transistor are set at the same potential,

current into a junction between said drain of said fourth field effect transistor and said feedback path and current into a junction between said source of said fourth field effect transistor and said source of said third field effect transistor are set to flow independently of each other,

said gate and said drain of said fourth field effect transistor serve as two ports of said active inductor

Claim 4 (Withdrawn): The active inductor according to claim 2, further comprising a resistor connected in series to said two ports of said inductor.

Claim 5 (Withdrawn): The active inductor according to claim 3, further comprising a resistor connected in series to said two ports of said inductor

Claim 6 (Currently Amended) ~~The active inductor according to claim 1, further comprising~~ An active inductor comprising first and second field effect transistors, each having a source, a gate and a drain, wherein

said drain of said first field effect transistor is connected to said source of said second field effect transistor

said gate of said first field effect transistor is connected to said drain of said second field effect transistor with no active element interposed therebetween,

said active inductor further comprising a feedback path provided between said source of said first field effect transistor and said gate of said second field effect transistor, wherein

said gate and said source of said second field effect transistor serve as two ports of said active inductor, and

a field effect transistor for feedback provided on said feedback path, having a source connected to said source of said first field effect transistor, a gate and a drain connected to each other and to one of said two ports of said inductor.

Claim 7 (Withdrawn): The active inductor according to claim 2, further comprising a field effect transistor for feedback provided on said feedback path, having a source connected to said source of said first field effect transistor, a gate and a drain connected to each other and to one of said two ports of said inductor.

Claim 8 (Withdrawn): The active inductor according to claim 3 further comprising a field effect transistor for feedback provided on said feedback path, having a source connected to said source of said first field effect transistor, a gate and a drain connected to each other and to one of said two ports of said inductor.

Claim 9 (Withdrawn): The active inductor according to claim 4, further comprising

a field effect transistor for feedback provided on said feedback path, having a source connected to said source of said first field effect transistor, a gate and a drain connected to each other and to one of said two ports of said inductor.

Claim 10 (Withdrawn). The active inductor according to claim 5, further comprising a field effect transistor for feedback provided on said feedback path, having a source connected to said source of said first field effect transistor, a gate and a drain connected to each other and to one of said two ports of said inductor.

Claim 11 (Currently Amended): ~~The active inductor according to claim 1:~~ An active inductor comprising first and second field effect transistors, each having a source, a gate and a drain, wherein

said drain of said first field effect transistor is connected to said source of said second field effect transistor,

said gate of said first field effect transistor is connected to said drain of said second field effect transistor with no active element interposed therebetween,

said active inductor further comprising a feedback path provided between said source of said first field effect transistor and said gate of said second field effect transistor, wherein

said gate and said source of said second field effect transistor serve as two ports of said active inductor, and

further comprising a resistor for feedback provided on said feedback path.

Claim 12 (Withdrawn). The active inductor according to claim 2, further comprising a resistor for feedback provided on said feedback path.

Claim 13 (Withdrawn): The active inductor according to claim 3, further comprising a resistor for feedback provided on said feedback path.

Claim 14 (Withdrawn): The active inductor according to claim 4, further comprising a resistor for feedback provided on said feedback path.

Claim 15 (Withdrawn): The active inductor according to claim 5, further comprising a resistor for feedback provided on said feedback path.

Claim 16 (Currently Amended): ~~The active inductor according to Claim 1.~~ An active inductor comprising first and second field effect transistors, each having a source, a gate and a drain, wherein

said drain of said first field effect transistor is connected to said source of said second field effect transistor,

said gate of said first field effect transistor is connected to said drain of said second field effect transistor with no active element interposed therebetween,

said active inductor further comprising a feedback path provided between said source of said first field effect transistor and said gate of said second field effect transistor, wherein

said gate and said source of said second field effect transistor serve as two ports of said active inductor, and

further comprising a second capacitor interposed between said gate of said first field effect transistor and said drain of said second field effect transistor;

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Claim 17 (Previously Presented): The active inductor according to Claim 16, further comprising a third capacitor interposed between said drain of said first field effect transistor and said gate of said second field effect transistor.

Claim 18 (Previously Presented): The active inductor according to Claim 17, further comprising a fourth capacitor provided on said feedback path.

Claim 19 (Previously Presented): The active inductor according to Claim 16, further comprising a fourth capacitor provided on said feedback path.